

CONFERENCE PROGRAM



Day 1. Sunday, 7 September 2008 - Venue Melia Valencia Palace Hotel

14:00h - 15:00h. Registration of participants

15:00h - 15:20h. Opening de Conference
Helen Juhola, Susana Otero

15:20h - 15:30h. Introduction of new members

15:30h - 16:00h. OPENING PRESENTATION

Environmental challenge for the Graphic Industry: Cleaning technologies and Best Available Techniques BATs
Susana Otero, AIDO, Spain

16:00h - 16:30h. Coffee Break

16:30h - 18:10h. PLENARY SESSION 1: Developments in the printing Industry

Chair: *Helene Juhola*

16:30h - 16:55h. Organized alliances in the printing industry
A. Nordin, Mid Sweden University, T. Mejttoft, KTH & SFTI-Packforsk, Sweden

16:55h - 17:20h. Magazine product structure and workflow control between a publisher and a printer
O. Kuusisto, H. Antikainen, J. Pajukanta, VTT, Finland

17:20h - 17:45h. Transaction costs and their influence on institutional arrangements - A comparison between the Swedish and the German printing industry
S. Packmohr, University of Osnabrück, Germany, T. Mejttoft, KTH & STFI Packforsk, Sweden

17:45h - 18:10h. Implementing TQM in graphic arts industry by six sigma concepts - a case study
R. Anayath, K. Prayagi, Print Media Academy Heidelberg India, India

18:30h - 18:45h. Welcome speech (Mr. Emilio Pérez Picazo AIDO's Director/Member of Valencian Government)

19:00h - 21:00h. Welcome cocktail, Spanish guitar concert (Palau de la Música)

09:00h - 09:40h. Keynote lecture: Status, news and trends in print production technologies and systems and for printed products/media design - global challenges to science, R&D, education and markets to improve the power and secure the future of print .
Helmut Kipphan, Consultant/Editor for Media Technologies & Sciences, Germany

09:40h - 10:55h. PLENARY SESSION 2: Special Printing

09:40h - 10:05h. Security printing for product packaging in industrial printing applications.
S. Bonev, B. Wimitzer, Fach-hochschule Mannheim, Germany

10:05h - 10:30h. Colour control with dual separation for daylight and daylight/infrared light
I. Ziljak, J. Ziljak-Vujik, K. Pap, FGA, Croatia

10:30h - 10:55h. Integration of screen-printed antenna in plastic body parts using in-mould technology
I. Petersen, M. Pflerschinger, G. Hübner, Hochschule der Medien, Germany

10:55h - 11:20h. Coffee Break

11:20h - 13:00h. SESSION 3A: Printing Operations.

11:20h - 11:45h. Operating maintenance model for modern printing machines
C. Horvath, PNYME, Hungary

11:45h - 12:10h. Pressroom draw variation and its impact on web breaks
N. Deng, F. Parent, T. Manfred, J. Aspler, J. Hamel, Paprican, Canada

12:10h - 12:35h. Removing the constraints in publication printing.
A. Bjurstedt, Sweden

12:35h - 13:00h. Delivery times and closeness to geographic market
T. Mejtöft, KTH & STFI-Packforsk, M. Viström, STFI-Packforsk, Sweden

11:20h - 13:00h. SESSION 3B: Measuring methods.

11:20h - 11:45h. Measurement possibilities of interference layers on a paper
M. Klanjsek Gunde, M. Cvegljic, A. Jelen, N. Hauptman, G. Golob, National Institute of Chemistry, Slovenia

11:45h - 12:10h. In situ monitoring of the photo polymerization of UV curable acrylate coatings.
E.M. Casagrande, A. Hörner, A. Wixforth, MAN Roland Druckmasch. AG, Germany.

12:10h - 12:35h. Inter-instrument agreement in colour and density measurement.
A. Williams, IFRA, Germany

12:35h - 13:00h. Method to deal with color measurements on papers containing fluorescent whitening agents.
E.M. Löffler, P. Green, Hochschule der Medien, Germany

13:00h - 14:20h. Lunch Break

14:20h - 16:00h. SESSION 4A: Printing on coated surfaces

14:20h - 14:45h. Flexographic print quality of pilot coated paperboard.
R. Olsson, Li Yang, M. Lestelius, Holmen Paper AB, Sweden

14:45h - 15:10h. The effects of surface treatment on digital print quality of extrusion coated paperboard
J. Lahti, M. Tuominen, Tampere University of Technology, Finland

15:10h - 15:35h. Rotogravure printability of coated paper samples - development of a new test to measure dynamic contact under the printing nip
R. Bollström, J. Preston, K. Nylander, M. Toivakka, J. Peltonen, Abo Akademi University, Finland

15:35h - 16:00h. Influence of plasma activation on absorption of ink components and dampening water in sheet-fed offset printing.
M. Pykönen, H. Silvaani, P. Fardim, M. Toivakka, Abo Akademi University, Finland

16:00h - 16:20h. Coffee Break

16:20h - 18:00h. SESSION 5A: Inks

16:20h - 16:45h. Theoretical investigation into the pigment-pigment and pigment-resin binding energies associated with the magenta bodying reaction of water-based inks.
S. Williams, RIT, USA

16:45h - 17:10h. Evaluation of the ink transfer of prints using the low-angle shaving system.
Y. Ozaki, N. Fujisawa, E. Kawamura, National Printing Bureau of Japan, Japan

17:10h - 17:35h. Curing of UV ink and product safety.
M. Kariniemi, A. Ilmonen, E. Kenttä, S. Sundquist, B. Aurela, KCL, Finland.

17:35h - 18:00h. Ink transfer during flexographic printing to paper.
T.C. Claypole, D.G. Beynon, S.M. Hamblyn, WCPC, United Kingdom.

14:20h - 16:00h. SESSION 4B: Image and color quality

14:20h - 14:45h. Implementation of global and local thresholding algorithms in image segmentation of coloured prints.
M. Lazar, A. Hladnik, NTF, Slovenia

14:45h - 15:10h. Improved gamut boundary determination for color gamut mapping.
A.M. Bakke, I. Farup, J. Y. Hardeberg, Gjøvik University College, Norway

15:10h - 15:35h. Use of static and dynamic device link profiles: incidence of colorimetric accuracy and ink savings.
A. Trichon, L. Chagas, E. Khoury, F. Fournié, N. Hassissi, EFPG, France

15:35h - 16:00h. Predictability of spot colors and their overprints.
R. Chung, et al., RIT, USA

16:20h - 18:00h. SESSION 5B: Color and print quality

16:20h - 16:45h. Colour management - differences arising between analogue and digital photo reproduction chains
K. Saukkoriipi, P. Miettinen, Future Printing Center Oy, Finland

16:45h - 17:10h. Quality control and colour assessment for flexography and gravure printing based on machine vision.
A. Navarro Lopez, J. Caballero, J. Esteve-Taboada, J. Hervás, AIDO, Spain

17:10h - 17:35h. Developing a test procedure for newsprint color quality evaluation
F. Put, VIGC, Belgium

17:35h - 18:00h. Causes of matt/gloss effects ("ghosting") in sheet-fed offset
U. Berthold, G. Sommer, Fogra, Germany

09:00h - 10:45h. **PLENARY SESSION 6: Non-impact Printing**

09:00h - 09:30h. **Invited lecture:** Prize for best presentation at the Printing Future Days '07. Numerical simulation and investigation of processes present in AC corona charging systems.
Ingo Reinhold, Chemnitz University of Technology, Germany

09:30h - 09:55h. Surface properties and UV ink-jet printability of recycled polyolefins
D. Gregor-Svetec, T. Muck, G. Galob, NTF, Slovenia

09:55h - 10:20h. Toner spreading during the fixing stage
E. Hakola, P. Öittinen, J. Koskinen, U. Forsström, KCL, Finland

10:20h - 10:45h. Insight into IJ ink/paper interaction using drop spreading model
M. Kaplanová, L. Otáhalová, University of Pardubice, Czech Republic, *T. Muck*, University of Ljubljana, Slovenia

10:45h - 11:15h. **Coffee Break**

11:15h - 12:30h. **SESSION 7A: Screening**

11:15h - 11:40h. High definition halftone printing - HDHP
Y.V. Kuznetsov, NWIP, Russia

11:40h - 12:05h. Finding optimum screen combinations for adjustable hybrid screening technologies in offset lithography.
Yung-Cheng Hsieh, Hui-Wen Cheng, NTUA, Taiwan

12:05h - 12:30h. Method of objective evaluation of fine detail distortion in the process of screening.
Y.V. Kuznetsov, D.E. Zheludev, NWIP, Russia

12:30h - 13:45h. **Lunch Break**

13:45h - 15:00h. **SESSION 8A: Materials**

13:45h - 14:10h. Highly accurate material characterization of paper for the simulation of printing processes
T. Kaulitz, E. Dörsam, TU Darmstadt, Germany

14:10h - 14:35h. Analysis of interrelation of paper printability with function of a relief of its surface
L. Varepo, Omsk State Technical University, Russia

14:35h - 15:00h. Considerations for thermally engineered coated printing papers
P. Gerstner, P. Gane, Helsinki University of Technology, Finland

11:15h - 12:30h. **SESSION 7B: Printed functionality**

11:15h - 11:40h. Rotogravure for printed electronics
A. Pekarovicova, E. Hrehorova, P.D. Fleming, M. Rebros, M.K. Joyce, Western Michigan University, USA

11:40h - 12:05h. The impact of conductive carbon properties on print performance
YE.H. Jewell, T.C. Claypole, S.R. Roberts, D.C. Bould, WCPC, United Kingdom

12:05h - 12:30h. Enzyme printing by nip transfer
T. Jabrane, M. Dubé, P. Mangin, CIPP, Canada

13:45h - 15:00h. **SESSION 8B: New Media**

13:45h - 14:10h. Business from hybrid media and printed functionality
U. Lindqvist, P. Moilanen, VTT, Finland

14:10h - 14:35h. Typography on web banners
K. Mozina, R. Horvat, NTF, Slovenia

14:35h - 15:00h. Distributing and publishing newspaper content in digital TV platform
O. Nurmi, VTT, Finland

15:00h - 15:20h. **Coffee Break**

15:20h - 15:50h. **Industrial Presentation:** HP latex printing technologies. A new environmentally responsible era in commercial printing.
V. Lorenc, HP/Bespoke

15:50h - 17:05h. **PLENARY SESSION 9: Sustainable print production**

15:50h - 16:15h. Ecodesign management system adapted to the graphic arts industry: a case study
D. Pérez, V. de Gracia, J.C. Iglesias, S. Otero, AIDO, Spain

16:15h - 16:40h. ICC profiling of solvent and ecosolvent inkjet
R.M. Adams, Ryerson University, Canada

16:40h - 17:05h. Changes in sustainability due to technology development in selected printing processes
P. Viluksela, H. Wessman, M. Nors, T. Pajula, H. Pihkola, K. Behm, EVTEK, Finland

17:05h - 17:30h. **Closing of the conference**

Helene Juhola

36th International Research Conference of IARIGAI, Stockholm, 2009

Presentation by STF-Packforsk

17:30h - 17:45h. **Break**

17:45h - 18:45h. **General Assembly** (members only)

20:00h - 24:00h. **Conference dinner** (Las Arenas Hotel and Spa)

SOCIAL PROGRAM

Day 1. Sunday, 7 September 2008

Welcome Cocktail (All participants)

Typical appetizers of the Spanish gastronomy will be served along with soft drinks, wines and liquors.

Spanish Guitar Concert (All participants)

A Spanish guitar duet will liven up the cocktail with the pieces by Valencian Composers.

Location: Palau de la Música, Ala Este del Vestíbulo de los Naranjos.

Time: 19:00h - 21:00h.

Within walking distance from the hotel.

Day 2. Monday, 8 September 2008

Visit to the City of Arts and Sciences of Valencia. Oceanographic (Partners program)

Time: 9:00h - 12:00h.

Starting from the hotel on foot.

Monuments and Historic Centre Route. (All participants)

Time: 19:00h - 21:00h.

Starting from the hotel by bus to the North Railway Station.

Return on your own.

Day 3. Tuesday, 9 September 2008

Visit to the Lladro's Factory - Museum. (Partners program)

Time: 9:00h - 12:00h.

Starting from the hotel by bus to the Lladro's Factory.

Return to the Hotel by bus.

Gala Dinner at the Las Arenas Hotel and Spa. (All participants)

Time: 20:00h. – 24:00h.

Starting from the hotel by bus to the Las Arenas Hotel and Spa.

Return to the Hotel by bus.

Day 4. Wednesday, 10 September 2008

Industrial Visit: AGM. Artes Gráficas del Mediterráneo. (All participants)

AGM is the biggest printing plant of the Valencian Community. It has 2 rotary presses for offset printing, 3 rotary presses for newspaper printing and several devices for digital printing. They print one of the two most important newspapers published in Valencia, LEVANTE.

<http://www.agmprint.com/>

Time: 9:00h – 12:00h.

Starting from the hotel by bus to AGM Installations.

Return to the Hotel by bus.





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